No. 3-2007 MONTHLY PACIFIC ENSO DISCUSSION FOR MICRONESIA AND AMERICAN SAMOA

March 2007

The Pacific ENSO Applications Center (PEAC) disseminated a special bulletin update to the first quarter 2007 newsletter (refer to

http://www.soest.hawaii.edu/MET/Enso/peu/update.html) and is preparing the second quarter bulletin, scheduled for release in mid-April. The Climate Prediction Center (CPC) stated the following in its March 8, 2007 ENSO Diagnostic Discussion (refer to http://www.cpc.ncep.noaa.gov): "A transition from ENSO-neutral to La Niña conditions is possible during the next 2-3 months." In addition, the CPC noted: "The pattern of anomalously warm SSTs associated with El Niño disappeared from the Pacific east of the date line during February. By the end of the month, SSTs were near average in the vicinity of the date line, and below average over the eastern equatorial Pacific between 140°W and the west coast of South America." The cooling of the SSTs during the last two months has been accompanied by a rapid decrease in upper ocean heat content. The CPC further observes that: "These trends in surface and subsurface ocean temperatures indicate that the warm (El Niño) episode has ended and that conditions are becoming favorable for La Niña to develop."

Most of the latest climate forecast models predict continued anomalous cooling during the next 2-3 months. Climate models generally cannot predict beyond the May-June timeframe with much skill, so "there is some uncertainty in the forecast periods after May 2007". Historically, atmospheric influences of El Niño linger a month or two after the ocean returns to ENSO-neutral or transitions to La Niña.

Tropical cyclone activity in Micronesia appears to be over until at least the late northern hemisphere spring or early summer. American Samoa, however, could experience some additional tropical cyclone activity over the next 1-2 months, but most activity will be shifted to the west due to the rapid weakening of El Niño. American Samoa should experience somewhat less than normal rainfall. We expect drier than normal conditions into May in most locations of Micronesia north of 8°N. We also anticipate drier than normal conditions for the Marshall Islands north of 6°N through May or June and for the Mariana Islands through July. Most locations north of 8°N will average about 60% of normal rainfall during the period, with the possibility of 1-2 months being below 50%. Conditions will be drier in the Republic of the Marshall Islands. We recommend that all locations in Micronesia that have limited water resources implement procedures to conserve those water resources. This is important for the low islands/atolls (especially the highly populated islands of Majuro and Ebeye) and for the high islands of Chuuk and Saipan.

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Coordinated with the Climate Prediction Center and the Pacific ENSO Applications Center.